

NEW PLANTS FROM URBAN ENVIRONMENT OF BARODA, GUJARAT¹

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(With a plate)

INTRODUCTION

The urban centre of Baroda has of late been experiencing phenomenal growth of population and human settlements due to rapid industrialization. These sudden developments have created problems affecting the physical environment and the biotic components as well. The effects of these intense biotic stresses on the quality and quantity of the vegetal cover at Baroda are presently being assessed. While working with this ecological problem, a number of plants hitherto not reported either from Baroda or from the wider region of Gujarat (Shah 1980) have been noted. The present note, therefore includes our observations on the morphology, phenology and availability of these plants in the urban areas of Baroda.

Amaranthus dubius Mart. Hort. Erl. 197, 1814; Fl. Males. 4 (1): 79, 1954.

An erect, much-branched annual herb with striate stem. Leaves ovate, cuneate at the base. Flowers in axillary and terminal spikes; bracts ovate with a long mucro, thinly membranous; tepals 5, with a thin midrib in lower half, much thickened in the upper half; stamens 5; styles 3.

Rare, the plant was noted along the banks of a nallah near the sewage disposal area.

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Flowers & Fruits: July-October.

SNP. 536.

Andrachne telephioides Linn. Sp. Pl. 1014, 1753; Hooker 5:284; Tackholm 245. (Plate).

A prostrate, glabrous herb. Stems many, 6 to 20 cms. long, arising from the root stock, slender, leafy. Leaves sessile, obovate, fleshy with tapering base. Male flowers smaller, clustered in axils, and females solitary and double in size; disc glands slightly lobed, membranous; style 3 fid. Capsule depressed globose, hairy.

The plant was collected from the moist banks of Timbi tank.

Flowers & Fruits: December-March.

SNP. 721, 1036, 1037.

Conyza leucantha (D. Don) Ludlow and Raven, Kew Bull. 17 71, 1963.

C. viscidula Wall. ex DC., Prodr. 5: 383, 1836; Hooker, 3: 258; Duthie 1: 410.

A tall, glandular-pubescent corymbosely branched herb. Leaves lanceolate, narrowed at both ends, viscid-puberulous on both surfaces. Heads yellow, in large, loose corymbs. Achenes obovoid, margined, first minutely hairy then glabrous.

The plant was collected in wheat fields from Makarpura and Maneja area.

Flowers & Fruits: December-February.

SNP. 742, 1086.

Cyperus pulcherrimus Willd. in Kunth, Enum. v. 2 (1837) p. 35; Hooker 6: 600; Cooke 3: 376.

A tufted stout herb. Stem trigonous. Leaves

narrowly linear, 1-nerved. Umbel compound, contracted with many rays; bracts 3-6. Spikelets densely crowded; Rachilla not winged; glumes ovate-oblong, obtuse, with crisped incurved tips, sides hyaline with 2 reddish brown bands; stamens 2. Nut half as long as glume, stipitate, trigonous, acute at both ends, granulate.

The plant was collected from shady localities on moist banks of Vishwamitri river.

Flowers & Fruits: January-April.

SNP. 768, 1074, 1075.

Eriocaulon cinereum R. Br. Prodr. 254, 1810.

E. sieboldianum Sieb. & Zucc. ex Steud.

Syn. Pl. Cyp. 2: 272, 1855; Hooker 6: 577; Cooke 3: 357.

A stemless, glabrous herb. Leaves linear-oblong. Peduncles glabrous, many-ribbed; heads white-puberulous; receptacles, involucral and floral bracts glabrous.

Not common; observed on the muddy banks of Harni and Timbi ponds.

Flowers & Fruits: September-December.

SNP. 687, 996.

Euphorbia zornioides Boiss. in DC. Prodr. 15(2) 19, 1862; Hooker 5: 246; Cooke 3: 60.

A glabrous erect herb with reddish stem. Leaves linear-oblong with pink margins. Involucres solitary, glabrous; petaloid limbs rosy with ovate lobes. Capsule globose.

Noted in cultivated fields mixed with grasses at Pratapnagar area.

Flowers & Fruits: July-September.

SNP. 92, 330.

Hemigraphis crenata (Bth. ex Hohenack.) Bremek. in Mat. Mon. Strob. 137, 1944.

H. elegans Nees var. *crenata* (Bth. ex Hohenack.) Clarke, in Hk. f. FBI. 4: 425, 1844; Cooke 2: 435.

A partly diffuse, viscid herb, softly white hairy. Younger stem subquadrangular, hairy. Leaves ovate, crenate-serrate, not sharply

toothed, base cuneate, hairy. Flowers in heads; sepals subequal, one much larger than other four, linear hairy, and ciliate. Corolla tube pale blue, limbs blue, ovate; stamens 4, two longer densely bearded in their upper half by long, flat papillose hairs. Capsule linear-oblong, pubescent; seeds 8-10, orbicular.

The plant was collected from moist banks of Vishwamitri river.

Flowers & Fruits: January-April.

SNP. 540, 745, 1079.

Shah (op. cit.) reports this species on the authority of Saxton and Sedgwick (1918, p. 289) who collected it from North Gujarat.

Hydrocotyle javanica Thunb. Dissert. Hydroc. p. 3, No. 17, p. 6, t. 2, 1798; Hooker 2: 667; Cooke 1: 597. (Plate).

A long, succulent prostrate and decumbent herb. Leaves sub-orbicular, sub-entire, coarsely crenate, hairy on nerves. Flowers pale green, crowded in dense, globular umbels. Fruit orbicular, mericarps with acute primary ridges.

The plant was collected from the moist banks of Harni tank under the shade.

Flowers & Fruits: October-January.

SNP. 694, 1030.

Cooke in Flora of Bombay Presidency has included this plant on Woodrow's authority. He has seen no Bombay specimen and none from that of the Presidency in Herb. Kew.

According to Santapau [Fl. Saurashtra (1963), p. 254] *Hydrocotyle* is occasionally, though rarely found in Western India.

Tribulus rajasthanensis Bhandari et Sharma in Bot. Notiser, 129: 367, 1976; Bhandari, Fl. Ind. Desert 88, 1978. (Plate).

A diffusely prostrate herb. Stem densely pubescent and sparingly hirsute. Leaves opposite, alternate in lower region, unequal at nodes; leaflets upto 7 pairs. Flowers bright yellow; stamens 8; ovary with bulbous-based, bristly hairs directed upwards; stigma pyra-

